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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/696,431	10/29/2003	Cherng-Chyi Han	HT03-008	6805	
7590 04/24/2007 STEPHEN B. ACKERMAN 28 DAVIS AVENUE			EXAMINER KIM, PAUL D		
	SIE, NY 12603		· ART UNIT	PAPER NUMBER	
			3729		
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE	DELIVER	DELIVERY MODE	
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Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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Paul D. Kim Paul D. Kim S729 Period for Reply	Office Action Summers	10/696,431	HAN ET AL.				
The MALING DATE of this communication appears on the cover sheet with the correspondence address ─ Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions to them shys be available under the proxime of 37 CFT 1-1360, in no event, however, may a reply be limely filled in the proxime of 37 CFT 1-1360, in no event, however, may a reply be limely filled in the proximent of 37 CFT 1-1360, in no event, however, may a reply be limely filled at the second advanced abover, the maximum statutory period will apply and will expire SIX (8) MONTHS from the mailing date of this communication. Failshe to preven by application to expense above the proximent of the pro	Oπice Action Summary	Examiner	Art Unit				
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DETAILED ACTION

This office action is a response to the amendment filed on 2/7/2007.

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kouchiyama (US PAT. 6,101,071) in view of Kikuchi et al. (US PGPUB 2003/0048578 A1).

Kouchiyama teaches a process of making a reproducing head comprising steps of: providing a shield (33 and 37) in the form of a layer of ferromagnetic material on a substrate (31); inserting a layer of non-magnetic material (32) between the shield and the substrate; and splitting the shield into two opposing parts (33 and 37) separated by a gap (34) as shown in Fig. 11 (see also col. 9, lines 10-43).

However, Kouchiyama fails to teach the non-magnetic material having the thermal conductivity greater than about 300 W/m.K. Kikuchi et al. teach a process of making a magnetic head having a heat sink to be used for the magnetic head including non-magnetic high thermal conductivity material such as Cu or Ni alloy (as per claim 2) having the thermal conductivity greater than about 300 W/m.K in order to prevent an unnecessary influence to a magnetic circuit of the magnetic head (see also paragraph

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[0047] and [0048]). Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify a process of fabricating a reproducing head of Kouchiyama by using a non-magnetic high thermal conductivity material as taught by Kikuchi et al. in order to prevent an unnecessary influence to a magnetic circuit of the magnetic head.

As per claims 3 and 4 At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to provide a thickness of the non-, magnetic high thermal conductivity material and a width of the gap as recited in the claimed invention because one of ordinary skill in the art would have expected Applicant's invention to perform equally well with Kouchiyama, modified by Kikuchi et al., because the non-magnetic material having the thermal conductivity as recited in the claimed invention would perform equally well such as thermal conduction with the non-magnetic material in Kikuchi et al. Therefore, it would have been an obvious matter of design choice to modify the thickness of the non-, magnetic high thermal conductivity material of Kouchiyama, modified by Kikuchi et al., to obtain the invention as specified in claim 3. In addition, the thickness of the gap (as per claim 4) would also have been an obvious matter of design choice to make a desired reproducing head of Kouchiyama, modified by Kikuchi et al.

Response to Arguments

3. Applicant's arguments with respect to claims 1-4 have been considered but are most in view of the new ground(s) of rejection.

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Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul D. Kim whose telephone number is 571-272-4565. The examiner can normally be reached on Monday-Thursday between 6:00 AM to 2:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 571-272-4690. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Paul D Kim Primary Examiner

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